

REMARKS

In response to the Office action dated November 26, 2007, Applicants respectfully request reconsideration based on the above amendments and the following remarks. Applicants respectfully submit that the claims as presented are in condition for allowance.

Claims 1-5, 7-10, 13-15, 18-22 and 26 are pending in the present Application. No claims are currently amended and claims 27-34 are added, leaving claims 1-5, 7-10, 13-15, 18-22 and 26-34 for consideration upon entry of the present amendment and following remarks.

Support for the new claims may be found at least in the specification, the figures, and the claims as originally filed, specifically in FIGS. 3, 6 and 8.

Reconsideration and allowance of the claims are respectfully requested in view of the above amendments and the following remarks.

Claim Rejections Under 35 U.S.C. § 112

Rejections under 1st Paragraph

Claims 1 and 14 stand rejected under 35 U.S.C. § 112, first paragraph, as allegedly failing to be fully enabled by the specification as filed. Specifically the Examiner states, “the specification, while being enabling for transmitting signals to gate lines 121 and data lines 171, does not reasonably provide enablement for testing. The specification does not enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to test the invention commensurate in scope with these claims.” The Examiner further states, “the shorting bar 320 connects to all the first and second driving signal wires 521/522 and data leads 520; therefore the testing signals with different voltages transmitting[sic] through the first and second driving signal wires 521/522 and data leads 520 from outside will be short-circuit[sic] with a same electrical potential on the shorting bar and cannot be able to test the LCD device.”

Applicants respectfully draw the Examiner’s attention to independent claim 1. Claim 1 is directed towards an apparatus, specifically, a liquid crystal display (“LCD”) device. Claim 1 includes several structural limitations including an LCD panel, a first driving signal wire and a plurality of first connecting lines. A method for testing the LCD device is not included in independent claim 1 and therefore, the Examiner’s assertion that testing is not enabled is irrelevant. Furthermore, the shorting bar, which the Examiner alleges renders the apparatus untestable, is not claimed in independent claim 1. The specification as filed clearly provides

support for making and using the apparatus as claimed in independent claim 1, therefore, independent claim 1 is fully enabled by the specification as filed.

Claim 14 is dependent upon independent claim 1. Claim 14 includes a structural limitation including a shorting bar connected to the first driving signal wire. As discussed in detail in lines 19-24 of page 11 of the application as filed, a shorting bar may be formed adjacent to an upper edge of the panel assembly and extending in the longitudinal direction to connect to the gate driving signal lines 521-524 and the data lines for protection of the switching elements Q for electrostatic discharge protection of the switching elements. Also as discussed in the abovementioned section of the specification, the shorting bar may be eliminated by edge grinding along a cutting line after completion of the panel assembly.

First, one of ordinary skill in the art would understand that the shorting bar may be removed after completion of the panel assembly and before testing. Therefore, one of ordinary skill in the art would be able to make and use the apparatus as claimed in dependent claim 14.

Secondly, a method of testing the apparatus is not claimed in dependent claim 14, and therefore, whether or not such a method is supported by the specification is irrelevant.

In light of the above remarks it is respectfully requested that the Examiner reconsider the rejection of claims 1 and 14 under 35 U.S.C. §112.

Rejections under 2nd Paragraph

Claims 1 and 20 stand rejected under 35 U.S.C. § 112, second paragraph, as being allegedly incomplete for failing to particularly point out and distinctly claim the subject matter which Applicants regard as the invention. Specifically, the Examiner states the limitation “the first driving signal wire transmitted a gate-off voltage or a ground voltage” of claim 20 and the limitation “the first driving signal wire transmitted or supplied a gate-off voltage or a ground voltage to the first display signal wire” is inconsistent with the specification, which states “the gate-off voltage and the ground voltage supplied to gate driving IC 440”. The Examiner then states that because the gate-off voltage and the ground voltage are supplied to the gate driving IC 440, they are not supplied to the gate lines 121.

First, independent claim 1 clearly states, “wherein the first driving signal wire is separated from the first and second display signal wires”. (See lines 9-11 of independent claim

1). In addition, claim 20 clearly states, “the first driving signal wire transmits a gate-off voltage or a ground voltage.” (See lines 1 and 2 of claim 20).

Secondly, as described in detail in the specification as filed, the gate-off voltage and the ground voltage may be transmitted by signal lines 521 and 522, respectively. The gate-off voltage and the ground voltage is then supplied to the gate driving ICs 400 via gate driving lines 321 and 322 and contacts C3, and the gate-off voltage and the ground voltage may be supplied directly to the gate lines via contact portions C1. (See lines 6-11 of page 10 and lines 12-18 of page 11 of the specification as originally filed).

Therefore, there is no inconsistency between the claims as presented and the specification. As discussed in detail, the driving signal wire may supply a gate-off/ground voltage to both the gate lines and the gate driving ICs 440.

In light of the above remarks it is respectfully requested that the Examiner reconsider the rejection of claims 1 and 20 under 35 U.S.C. §112.

Claim Rejections Under 35 U.S.C. §102

In order to anticipate a claim under 35 U.S.C. §102, a single source must contain all of the elements of the claim. *Lewmar Marine v. Barient, Inc.*, 827 F.2d 744, 747, 3 U.S.P.Q.2d 1766, 1768 (Fed. Cir. 1987), *cert denied*, 484 U.S. 1007 (1988). Moreover, the single source must disclose all of the claimed elements “arranged as in the claim.” *Structural Rubber Prods. Co. v. Park Rubber Co.*, 749 F.2d 707, 716, 223 U.S.P.Q. 1264, 1274 (Fed. Cir. 1984). Missing elements may not be supplied by the knowledge of one skilled in the art or the disclosure of another reference. *Titanium Metals Corp. v. Banner*, 778 F.2d 775, 780, 227 U.S.P.Q. 773, 777 (Fed. Cir. 1985).

Claims 1, 7-10, 13, 15, 18, 19 and 26

The Examiner has rejected claims 1, 7-10, 13, 15, 18, 19 and 26 under 35 U.S.C. 102(b) as being allegedly anticipated by Nagata et al. (U.S. Patent No. 6,172,410, hereinafter “Nagata”). Applicants respectfully traverse.

Nagata is directed to a collective substrate of active-matrix substrates, a manufacturing method thereof and an inspection method thereof. The collective substrate is divided into a first block and a second block. Cells of the first block and second block form a corresponding signal input pad group wherein an inspection scanning signal is input via a scanning-line short ring connection line to the scanning lines, and an inspection display signal is input via a signal-line short ring connecting line to signal lines, and an auxiliary capacity wire signal is input via an auxiliary capacity wire main wire connecting line to auxiliary capacity wires. (See Abstract and FIG. 17).

Nagata does not disclose: **a plurality of first connecting lines disposed between the first driving signal wire and a part of the first display signal wire, and connected to the first driving signal wire; wherein the first connecting lines are electrically disconnected from the part of the first display signal wire** as claimed in independent claim 1 of the present invention.

The Examiner states that the inspection scanning lines 153 of Nagata are equivalent to the first driving signal wire as claimed and that the gate lines 2 of Nagata are equivalent to the first display signal lines as claimed. (See page 4 of the present Office action). However, Nagata does not disclose a connecting line disposed between the inspection scanning lines 153 and the gate lines 2, wherein the connecting line is electrically disconnected from the first display signal wire. As clearly shown in FIG. 17, lines connecting the inspection signal lines 153 and the gate lines 2 are electrically connected to the first display signal wire.

Thus, claim 1 is believed to be patentably distinct and not anticipated by Nagata. Claims 7-10, 13, 15, 18, 19 and 26 depend directly from claim 1, and thus include all the limitations of claim 1. It is thus believed that the dependent claims are allowable for at least the reasons given for independent claim 1, which is believed to be allowable.

Accordingly, Applicants respectfully request reconsideration and allowance of claims 1, 7-10, 13, 15, 18, 19 and 26.

Claims 1, 7-10, 13, 15, 18, 19 and 26

The Examiner has rejected claims 1-5, 7-10, 13, 15, 18, 19, 20-22 and 26 under 35 U.S.C. 102(e) as being allegedly anticipated by Kim et al. (U.S. Patent No. 6,636,288, hereinafter "Kim"). Applicants respectfully traverse.

Kim is directed to a liquid crystal display including gate signal interconnection wires formed at a corner portion of a substrate and outside the display area to transmit gate electrical signals, and provided with gate signal interconnection lines and first and second gate signal interconnection pads connected to both ends of the gate signal interconnection lines. (See Abstract and FIG. 1).

Kim does not disclose: **a plurality of first connecting lines disposed between the first driving signal wire and a part of the first display signal wire, and connected to the first driving signal wire** as claimed in independent claim 1 of the present invention.

The Examiner states, “Kim discloses a plurality of first connecting lines disposed between the first driving signal wire and a part of the first display signal wire 21, and connected to at least one of the first driving signal wire and the part of the first display signal wire.” However, this is not the limitation as presently claimed in independent claim 1. As claimed, the first connecting lines are disposed between the first driving signal wire and a part of the first display signal wire and must also be connected to the driving signal wire. Kim discloses driving signal wires 124 which are connected to a driving integrated chip 140; however, the driving signal wires 124 are not connected to gate signal lines 126 which connect to gate lines 21.

Thus, claim 1 is believed to be patentably distinct and not anticipated by Kim. Claims 2-5, 7-10, 13, 15, 18, 19, 20-22 and 26 depend directly from claim 1, and thus include all the limitations of claim 1. It is thus believed that the dependent claims are allowable for at least the reasons given for independent claim 1, which is believed to be allowable.

Accordingly, Applicants respectfully request reconsideration and allowance of claims 2-5, 7-10, 13, 15, 18, 19, 20-22 and 26.

Conclusion

All of the objections and rejections are herein overcome. In view of the foregoing, it is respectfully submitted that the instant application is in condition for allowance. No new matter is added by way of the present Amendments and Remarks, as support is found throughout the original filed specification, claims and drawings. Prompt issuance of Notice of Allowance is respectfully requested.

The Examiner is invited to contact Applicant's attorney at the below listed phone number regarding this response or otherwise concerning the present application.

Applicant hereby petitions for any necessary extension of time required under 37 C.F.R. 1.136(a) or 1.136(b) which may be required for entry and consideration of the present Reply.

If there are any charges due with respect to this Amendment or otherwise, please charge them to Deposit Account No. 06-1130 maintained by Applicant's attorneys.

Respectfully submitted,

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